

REMARKS

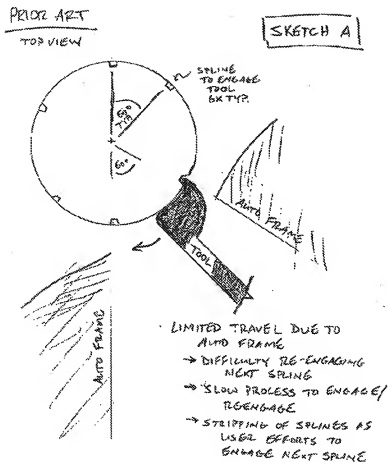
In the present Office Action, the Examiner rejects independent claims 35 and 43 as being obvious over FIG. 1 of the present application in view of U.S. Patent 2,810,313 to Hermanson, or in the alternative, over the Hermanson patent in view of FIG. 1. The dependent claims were further rejected as being obvious over these two references in conjunction with other cited art. By the present amendment, claims 35 and 43 have been amended to more particularly recite features of the method, while claims 36 and 39 have been cancelled and new claims 46 and 47 have been added.

"To establish a *prima facie* case of obviousness, three basic criteria must be met." MPEP 2143. One of the requirements is that there be motivation to combine the references. MPEP 2143.01. Another one of the requirements is that all of the claim limitations must be taught or suggested. MPEP 2143.03. For reasons stated below, the Applicant submits that the present rejection is not sustainable against the amended independent claims for one or both of the aforementioned MPEP requirements.

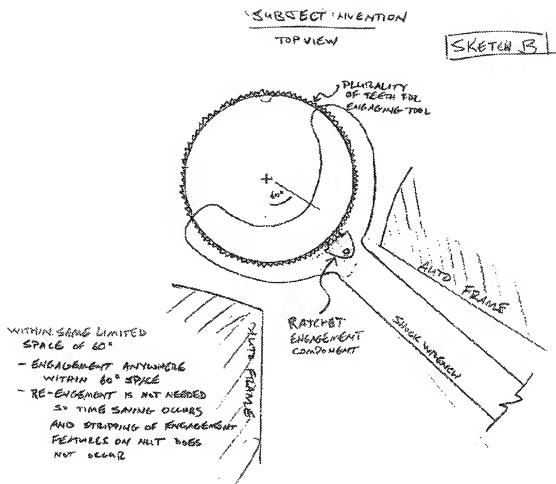
As stated in the original specification, race cars have adjustable coil-over shock absorber systems that passenger cars generally lack. The purpose of such adjustability is to provide suspension set-up modifications over the course of a race, time trial practice or other operation. The version presently used and identified as prior art (shown for example in FIG. 1) on race cars shows an adjustable nut **40** with numerous periodically-spaced adjustment wrench engagement slots **44**, as described at the bottom of page 9 and the top of page 10 of the original specification. As further stated on page 10 of the original specification, "it can be difficult or impossible" to engage the adjustment nut or to rotate the wrench and nut of the prior art of FIG. 1 in the confined spaces associated with an automotive shock absorber system. Engagement of the adjustment nut prior to our invention was only possible at six equally spaced intervals via defined splines on the rotating nut that allows engagement of the spanner wrench. Further, as discussed at page 2 of the original specification, quick, precise adjustments to the coil-over shock absorber

system is critical for racing applications. Speed is required in both placement of the adjusting wrench and wrench operation (rotation and re-engagement if required). Outcomes of such adjustments include a race car's ride height or weight jacking.

The following drawings are submitted for the Examiner's convenience to better explain the distinction of the amended claims over that of the prior art (of which FIG. 1 is an example). In the first drawing, sketch (A), a top view of the prior art and the limitations it induces for wrench placement, replacement and operation in a confined work space is shown to better emphasize what happens during the use of the adjustment system of FIG. 1. The approach of FIG. 1 is incompatible with engagement at essentially all points along the periphery of the adjustment nut, as it allows wrench placement at six geometries with the matching spanner wrench assuming the access of the race car suspension permits all such points of engagement. Once the wrench is placed, adjustments can be made and the next point of engagement is sixty degrees of rotation in order to advance the wrench to the next comparable engagement position. Due to the limited points of engagement within a limited work space, re-engagement using the spanner wrench of FIG. 1 leads to cuts, bruises and related injuries to a user's fingers; causes the integrity of the spline geometry to be compromised thereby leading to 'stripping' of the spline; and otherwise is difficult to achieve within the tight confines of a race car.



Sketch B illustrates the subject invention in top view. As can be seen, there are essentially continuous options that exist for wrench placement, re-engagement and operation, made possible by the engagement of the teeth on the outer surface of the shock absorber adjustment nut and the cooperating ratchet pawls.



Thus, the teaching of FIG. 1 is significantly different from that of the amended claims, showing at most that adjustable coil-over shock absorber systems have been used on race cars, not the continuous engagement between the shock absorber adjustment nut and the wrench.

The Hermanson patent does not correct the deficiencies as original FIG. 1, incorporating substantially similar periodically-spaced splines 27. As indicated above, such a configuration is incompatible with the presently claimed substantially continuous teeth on the outer periphery of the shock absorber adjustment nut. Accordingly, the combination of the Hermanson patent and FIG. 1 neither teaches all of the limitations of the amended independent claims nor provides a scintilla of evidence that such a combination is contemplated or suggested as a way to produce

the fine vehicle suspension setup adjustments made possible with the claimed invention. The Applicant submits that on this basis alone that the present combination of references is insufficient to maintain a prima facie case of obviousness under present USPTO practice.

The remaining patents do not correct the deficiencies of FIG. 1 and the Hermanson patent. U.S. Patent 4,562,757 to Furey, U.S. Patent 2,757,564 to Reaves, Published Application US 2004/0025642 to Hsien, U.S. Patent 6,367,354 to Mitchell, U.S. Patent 6,065,374 to Taggart and U.S. Patent 6,655,238 to Hsien (all of which were cited in one or more previous Office Actions) similarly do not teach the amended claim features that recite the substantially continuous points of engagement of the toothed shock absorber adjustment nut. Instead, they disclose a ratchet head that is an integral part of a wrench. It is the head that has a plurality of teeth on its outer periphery (see, for example, FIG. 6 of the Furey patent, FIGS. 2 through 4 of the Reaves patent and FIGS. 3 and 4 of the Hsien published application) rather than the claimed shock absorber adjustment nut that is clearly shown in FIGS. 5B and 8A. Since none of these teach or suggest the use of the continuous toothed shock absorber adjustment nut, their combination with one or both of FIG. 1 and the Hermanson patent are unavailing as an attempt to demonstrate such teaching. Being devoid of the claimed nut features means that the strictures of MPEP 2143.03 are not satisfied, and therefore renders these references inappropriate to help the Examiner establish a prima facie case of obviousness against amended independent claims 35 and 43, irrespective of whatever merits such references may have with regard to dependent claims.

Furthermore, the Mitchell, Taggart and Hsien patents teach closed-end wrenches. In contrast, the amended claims unequivocally recite that the shock absorber adjusting device be of an open-ended construction, thereby providing an additional basis for any combination including these references to not teach all of the claim limitations. Moreover, any contemplated use by the Examiner of the Mitchell, Taggart or Hsien patents to teach the claimed teeth arrangement of the shock absorber adjustment nut would not satisfy the MPEP requirements of providing a motivation to combine the references. Specifically, the Mitchell and Taggart patents are the archetypal teaching away from the claimed invention, as the use of their closed-end configuration (and concomitant inability to slip over the ends of the claimed coil-over shock absorber system)

is utterly impossible with the claimed method. Such teaching away has been held to be the antithesis of motivation, and in fact is a *per se* demonstration of lack of *prima facie* obviousness. See, e.g., *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988).

The Examiner has also cited U.S. Patent 4,436,468 to Ozaki et al. in a past Office Action as a way to render obvious one of the dependent claims. As with the references identified above, whatever merits the Ozaki patent has with regard to the dependent claims (of which the Applicant is not conceding), it clearly cannot correct the deficiencies of the cited primary references with regard to the amended independent claims 35 and 43. The Ozaki patent teaches a bicycle lock nut **1** that includes a threaded interior **6** that can be turned by a wrench to engage faceted surfaces **4** on the outer surface of nut **1**. Lock nut **1** does not have a continuously toothed outer surface, instead including periodically-spaced indentations or splines generally similar in construction and spacing to that of FIG. 1 or of the Hermanson patent. Moreover, what splines, knurling or related shaping it does possess are not discussed in conjunction with the use of any adjusting device (such as wrench). Thus, even if the lock nut **1** of the '468 patent were to teach all of the claimed features (which it does not), there is nothing to justify its combination with the primary references, as there is no indication that the beveled surfaces (best shown in the combination of FIGS. 1 and 2) of the splines are compatible with or could securely engage the detents on a spanner or related wrench. In fact, a fair reading of the Ozaki patent makes it clear that the lock nut **1** disclosed therein is NOT compatible with any form of wrench tightening, in that the faceted surface **4** above it is expressly deemed compatible with such wrench tightening, as column 3, lines 32 through 35 states that the hexagonal faceted surface is for engaging a spanner, wrench or related tool. By having its splined surface incompatible with wrench-based turning, lock nut **1** avoids the express recitations in the amended independent claims of a shock absorber adjustment nut for adjusting a coil-over shock absorber system, thereby failing to satisfy the MPEP 2143.03 requirements that all of the claimed elements be taught.

### CONCLUSION

In summary, the present amended independent claims 35 and 43 include recitations that are not taught by any combination of the presently and previously cited references. As such,

these references cannot be used to maintain the present rejection. Accordingly, the Applicant respectfully submits that the independent claims and all the remaining claims that depend from them are now in condition for allowance. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, notification of allowable subject matter is respectfully solicited.

#### SUBSTANCE OF INTERVIEW

On November 29, 2006, the Examiner extended the undersigned the courtesy of a telephonic interview, wherein both the Examiner's and Applicant's position were discussed. The Examiner indicated that FIG. 1 of the Applicant's disclosure teaches a coil-over shock absorber system for racing applications, and that such teaching, in conjunction with the teaching of the Hermanson patent (U.S. Patent 2,810,313), is read on by the present independent claims. The Applicant's position is that the devices depicted in FIG. 1 and the Hermanson patent merely reinforce one another, and that neither teach the engagement of a shock absorber adjusting device to a shock absorber adjusting nut where the substantial entirety of the nut outer periphery used to engage the device includes teeth to allow fine (i.e., small-angle) adjustment of the nut. No agreement was reached during the telephonic interview.

Respectfully submitted,  
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